

Michael O. Leavitt
Governor
Kathleen Clarke
Executive Director
Lowell P. Braxton
Division Director

Michael O. Leavitt
Governor
Salt Lake City, Utah 8
801-538-5340
801-538-7223 (TDD)

1594 West North Temple, Suite 1210 PO Box 145801 Salt Lake City, Utah 84114-5801 801-538-5340 801-559-3940 (Fax)

April 29, 2002

TO:

**Internal Files** 

FROM:

Karl R. Houskeeper, Reclamation Specialist, Team Lead

RE:

Application for a Permit Change - R645-301-100: General Contents, PacifiCorp,

Deer Creek Mine, C/015/018-02B

# **SUMMARY:**

The Division received an application (AM02B) for a permit change on March 4, 2002 from PacifiCorp, by and through its wholly owned subsidiary, Energy West Mining Company. This submittal indicates changes in the legal and financial section identified in the Deer Creek MRP as Volume 1, R645-301-100: General Contents, specifically, revisions made to update the Right of Entry information to include a 65.7 lease modification of Federal Lease U-06039.

Energy West submitted an Incidental Boundary Change (IBC) application to the Division on December 31, 2001. Several deficiencies were noted in this application (IB01K-1), one of which required the permittee to update the Right of Entry information. This application addresses the deficiency relative to the Right of Entry from application (IB01K-1).

In addition, this application also deletes six parcels of ground from the permit area that have been relinquished and/or terminated. This reduction in the permit area totals 1,885.52 acres and is indicated on the maps as well as in the text. The areas being removed from the permit area have been evaluated for subsidence, ownership & control, and hydrology issues.

Leases ML-22509 and U-7653 were undermined from the Deer Creek Mine during 1996 through January 1999. A large section of the surface in U-7653 has subsided a maximum of 6 feet. The 320-acre fee area owned by the LDS Church on the east side of the permit area was undermined from both the Deer Creek and Cottonwood/Wilberg Mines and the surface has subsided a maximum of 14 feet in the center. The areas being relinquished in leases U-24319, U-47979, and SL-064607-064621 were not undermined.

This memo focuses on the Right of Entry information and subsidence. Hydrology and ownership & control are being addressed under separate memos.

#### **TECHNICAL MEMO**

# **TECHNICAL ANAYLSIS:**

# **GENERAL CONTENTS**

# **VIOLATION INFORMATION**

Regulatory Reference: 30 CFR 773.15(b); 30 CFR 773.23; 30 CFR 778.14; R645-300-132; R645-301-113.

#### Analysis:

As part of this amendment the operator has provided updated information within Appendix B of the approved MRP. Appendix B contains an NOV list. The current list shows information for the last three years of all the applicable subsidiaries associated with PacifiCorp and/or Energy West Mining.

# Findings:

The information contained in Appendix B complies with the regulations.

# RIGHT OF ENTRY

Regulatory Reference: 30 CFR 778.15; R645-301-114

#### Analysis:

A new Chapter 1 in Volume 1 of the approved MRP has been submitted as part of this amendment. Chapter 1 has been updated and includes the legal description for the proposed IBC, Mill Fork Lease U-06039 containing 65.7 acres. In addition, the legal description has been modified to exclude several parcels of ground from the permit area. These parcels include: LDS FEE, Relinquished 11/18/98; SL – 064607, Relinquished 12/14/95; U- 47979, Relinquished 12/14/95; U – 024319, Relinquished 12/14/95; ML – 22509, Relinquished 12/06/01; and U – 7653, Terminated 3/18/2002.

#### **Findings:**

The legal description for the permit area contained in Appendix E was compared to Plate 1-1, Coal Ownership Map of the Deer Creek Mine Permit Area. The description contained in Appendix E matches the Permit Boundary identified on Plate 1-1, Coal Ownership Map of the Deer Creek Mine Permit Area. A commitment from the operator in the cover letter of this amendment stated that this new permit boundary would be placed on all maps that include a permit boundary on them. This commitment should include, but is not limited to, the following

#### **TECHNICAL MEMO**

Plates: Plate 1-1, Plate 1-2, Plate 1-3, Plate 2-14, Plate 2-15, Plate 2-16, Plate 2-17, Plate 2-18-A, Plate 2-18-B, Plate 2-19, Plate 3-6, Plate 3-7, Plate 4-5, and Plate 5-1.

No deficiencies were found in this section. However approval is conditioned upon the submittal of the above referenced maps and all maps that contain permit boundaries. In addition, the approval is conditional since it is tied to the approval of the IBC (IB01K-1).

# ENVIRONMENTAL RESOURCE INFORMATION

Regulatory Reference: Pub. L 95-87 Sections 507(b), 508(a), and 516(b); 30 CFR 783., et. al.

# SUBSIDENCE CONTROL PLAN

Regulatory Reference: 30 CFR 784.20, 817.121, 817.122; R645-301-521, -301-525, -301-724.

#### Analysis:

#### **Subsidence Control Plan**

In conjunction with the request to remove six parcels of ground from the current permit area, the Annual Subsidence Monitoring Report East/Trail Mountain Properties 2001 was reviewed. Each of the areas being removed from the permit area have been evaluated and a description of these analysis is as follows:

LDS Fee Area (Subsidence Study Area 2), Deer Creek 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup>, & 8<sup>th</sup> Longwall Panels, Wilberg 3<sup>rd</sup> through 13<sup>th</sup> Right Panels.

Page 14 of the Annual Subsidence Monitoring Report East/Trail Mountain Properties 2001 indicates that subsidence has stabilized at 13 feet in one area above the center of the multiple seam mining (Figure 10). The subsidence profiles (Figures 11 and 12) indicate that the subsidence has been stabile for the past 8 years or more. No springs have been identified over the subsidence area but two springs ½ to mile west, show no effects from mining (see Hydrologic Monitoring Report 2001).

SL-064607 & 064621 (Subsidence Study Area 3), Deer Creek 1st North Area.

Page 20 of the Annual Subsidence Monitoring Report East/Trail Mountain Properties 2001 indicates that no significant change has occurred in the past 7 years. The East Mountain/Trail Mountain 2001 Subsidence map does not highlight this area. Subsidence in area 3 has been less than 2 feet. The portion of the lease area being removed from the permit area has had no mining, nor subsidence from mining. The strata surrounding and above this area are generally dry. Mining has not affected the groundwater. The mined areas and subsidence from mining, discussed above, lie to the west of the area being removed from the permit area.

#### TECHNICAL MEMO

<u>U-024319 & U-47979 (Subsidence Study Area 21)</u>, Deer Creek 2<sup>nd</sup> East through 7<sup>th</sup> East Longwall Panels.

Page 102 of the Annual Subsidence Monitoring Report East/Trail Mountain Properties 2001 indicates that mining began in November of 1993 and finished in January 1996. A maximum of 6 to 8 feet of subsidence has occurred in this area. Indications are that subsidence has stabilized from recent transects. Hydrologic monitoring has not detected any change to the spring flows in this area. The area being removed from the permit area has had no mining, nor subsidence from mining. The mined areas and subsidence from mining, discussed above, lie to the west of the lease areas being removed from the permit area.

<u>U-7653 & ML-22509</u> (Subsidence Study Area 22), Deer Creek 2<sup>nd</sup> through 8<sup>th</sup> West Panels off 3<sup>rd</sup> North.

Page 22 of the Annual Subsidence Monitoring Report East/Trail Mountain Properties 2001 indicates that mining began in February 1996 and ended in April 1999. The maximum subsidence appears to have stabilized slightly over 7 feet maximum. Mining and subsidence from mining does not appear to have had an effect on the ground water. Monitoring of spring 89-65 will continue under the operational monitoring plan in the MRP until bond release.

# Findings:

Subsidence from mining has not affected any structures or buildings. Ground and/or surface water have not indicated any change in flow or quality. The areas where subsidence has occurred are remote. Subsidence has stabilized in these areas and no further subsidence is expected. The time frames in which subsidence last occurred have been long enough to assure that the effects resultant from subsidence is finished. No deficiencies were found in this section.

# **RECOMMENDATIONS:**

This amendment should be conditionally approved. The conditions for approval are as follows:

- 1) Submittal of all Plates that have the permit boundary, need to have the new permit boundary placed on them.
- 2) The approval of the IBC amendment (IB01K-1) needs to be in place, since that same area is addressed on the map and in the legal description of this amendment.